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Figure 1

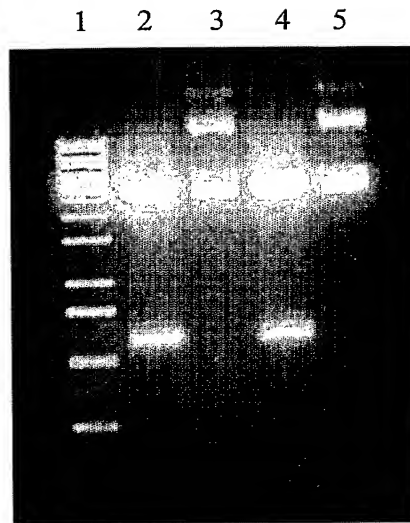
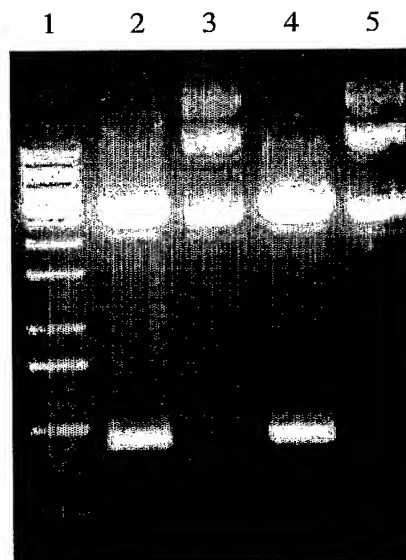


Figure 2



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Figure 3A

Query: 40 EGRAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVRAAELAGVLEATAAAKTAV 99
 E RAAELA +LEATA+AK+ EQD +E RAAELA LEATAAAK +
 Sbjct: 712 EERAAELASQLEATAAAKSSAEQDRENT RATLEQQLRSEEARAAELASQLEATAAAKMSA 771

Query: 100 EQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQXXXXXXXXXXXXXXXXXXXX 159
 EQ+RE TRA L K S EQ
 Sbjct: 772 EQDRENT RATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEER 831

Query: 160 XXXXXXXXKSTAAVKSAMEQDRENT RAT 187
 +ST A K + EQDRE+TRAT
 Sbjct: 832 AAELASQLESTTAAKMSAEQDRESTRAT 859

Figure 3B

Query: 29 EQEREKTRTAL E-----GRAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVR 81
 EQ+RE TR LE RAAELA +LEATA+AK EQD +E R
 Sbjct: 733 EQDRENT RATLEQQLRSEEARAAELASQLEATAAAKMSAEQDRENT RATLEQQLRDSEER 792

Query: 82 AAELAGVLEATAAAKTAVEQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQX 141
 AAELA LE+T AAK + EQ+RE TRA L K S EQ
 Sbjct: 793 AAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEERAAELASQLESTTAAKMSAEQD 852

Query: 142 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKSTAAVKSAMEQDRENT RAT 187
 +ST A K + EQDRE+TRAT
 Sbjct: 853 RESTRATLEQQLRSEERAAELASQLESTTAAKMSAEQDRESTRAT 898

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Figure 3C

Query: 29 EQEREKTRTALEG-----RAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVR 81
 EQ+RE TR LE RAAELA +LE+T +AK EQD +E R

Sbjct: 772 EQDRENTTRATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEER 831

Query: 82 AAELAGVLEATAAAKTAVEQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQX 141
 AAELA LE+T AAK + EQ+RE TRA L K S EQ

Sbjct: 832 AAELASQLESTTAAKMSAEQDRESTRATLEQQLRSEERAAELASQLESTTAAKMSAEQD 891

Query: 142 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKSTA AVKSAMEQDRENTTRA 186
 ++TAA KS+ EQDRENTTRA

Sbjct: 892 RESTRATLEQQLRDSEERAAELASQLEATAAAKSSAEQDRENTTRA 936

Figure 3D

Query: 40 EGRAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVRAAELAGVLEATAAAKTAV 99
 E RAAELA +LEATA+AK+ EQD +E RAAELA LEATAAAK +

Sbjct: 712 EERAAELASQLEATAAAKSSAEQDRENTTRATLEQQLRSEARAAELASQLEATAAAKMSA 771

Query: 100 EQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQXXXXXXXXXXXXXXXXXXXXX 159
 EQ+RE TRA L K S EQ

Sbjct: 772 EQDRENTTRATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEER 831

Query: 160 XXXXXXXXKSTA AVKSAMEQDRENTTRAT 187
 +ST A K + EQDRE+TRAT

Sbjct: 832 AAELASQLESTTAAKMSAEQDRESTRAT 859

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Figure 3E

Query: 29 EQEREKTRTALE-----GRAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVR 81
 EQ+RE TR LE RAAELA +LEATA+AK EQD +E R

Sbjct: 733 EQDRENTTRATLEQQLRRESEERAAELASQLEATAAAKMSAEQDRENTTRATLEQQLRDSEER 792

Query: 82 AAELAGVLEATAAAKTAVEQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQX 141
 AAELA LE+T AAK + EQ+RE TRA L K S EQ

Sbjct: 793 AAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEERAAELASQLESTTAAKMSAEQD 852

Query: 142 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKSTAAVKSAMEQDRENTTRAT 187
 +ST A K + EQDRE+TRAT

Sbjct: 853 RESTRATLEQQLRRESEERAAELASQLESTTAAKMSAEQDRESTRAT 898

Figure 3F

Query: 29 EQEREKTRTALEG-----RAAELARKLEATASAKNLVEQDXXXXXXXXXXXXXXXXXIAEVR 81
 EQ+RE TR LE RAAELA +LE+T +AK EQD +E R

Sbjct: 772 EQDRENTTRATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRDSEER 831

Query: 82 AAELAGVLEATAAAKTAVEQERERTRAALXXXXXXXXXXXXXXXXXXXXXXXXXXXXKTSVEQX 141
 AAELA LE+T AAK + EQ+RE TRA L K S EQ

Sbjct: 832 AAELASQLESTTAAKMSAEQDRESTRATLEQQLRRESEERAAELASQLESTTAAKMSAEQD 891

Query: 142 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXKSTAAVKSAMEQDRENTTRA 186
 ++TAA KS+ EQDRENTTRA

Sbjct: 892 RESTRATLEQQLRDSEERAAELASQLEATAAAKSSAEQDRENTTRA 936

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Figure 4

| | | | |
|-------|-----|--|-----|
| LCIMM | 121 | GAGCAGCAGCTTCGCGAATCCGAGGCGCGCGCTGCGGAGCTGGCGAGCCAGCTGGAGGCC | 180 |
| KEIMM | 1 | ----- | 1 |
| DDIMM | 1 | GAGCAGCAGCTTCGTGAATCCGAGGCGCGCGCTGCGGAGCTGAAAGCCGAGCTGGAGGCC | 60 |
| LCIMM | 181 | ACTGCTGCTGCGAAGATGTCAGCGGAGCAGGACCGCGAGAACACGAGGGCCACGCTAGAG | 240 |
| KEIMM | 1 | -----GAG | 3 |
| DDIMM | 61 | ACTGCTGCTGCGAAGACGTCCGTGGAGCAGGAGCGTGAGAAGAC-----GAG | 107 |
| LCIMM | 241 | CAGCAGCTTCGTGACTCCGAGGAGCGCGCTGCGGAGCTGCGAGCCAGCTGGAGTCCACT | 300 |
| KEIMM | 4 | CAGCAGCTTCGTGACTCCGAGGAGCGCGCTGCGGAGCTGATGCCGAAGTTAGAGGCGACT | 63 |
| DDIMM | 108 | GA-CGGCTCTG-----GAGCGCGCGCTGCGGAGCTGGCTCCAAACTGGAGGCGACT | 159 |
| LCIMM | 301 | ACTGCTGCGAAGATGTCAGCGGAGCAGGACCGCGAGAGCACGAGGGCCACGCTAGAGCAG | 360 |
| KEIMM | 64 | GCTGCTGCGAAGTCGTCCGCGGAGCAGGACCGCGAGAACACGAGGGCCACGTTGGAGCAG | 123 |
| DDIMM | 160 | GCTTCTGCGAAGAATTGCTAGAGCAGGACCGCGAGAGGACGAGGGCCACCTTGGAGGAA | 219 |
| LCIMM | 361 | CAGCTTCGTGACTCCGAGGAGCGCGCTGCGGAGCTGGCGAGCCAGCTGGAGTCCACTACT | 420 |
| KEIMM | 124 | CAGCTTCGCGAATCCGAGGAGCACGCTGCGGAGCTGAAGGCCAGCTGGAGTCCACTGCT | 183 |
| DDIMM | 220 | CGACTTCGTATTGCTGAGGTGCGCGCTGCGGAGCTGGCAGGAGTGCTGGAGGCCACTGCT | 279 |
| LCIMM | 421 | GCTGCGAAGATGTCAGCGGAGCAGGACCGCGAGAGCACGAGGGCCACGCTAGAGCAGCAG | 480 |
| KEIMM | 184 | GCTGCGAAGACCTCCGCGGAGCAGGACCGCGAGAACACGAGGGCCCGGTTGGAGCAGCGG | 243 |
| DDIMM | 280 | GCTGCGAAGACCGCGGTTGGAGCAGGAGCGTGAGAGGACGAGGGCCGCTTGGAGCAGCAG | 339 |
| LCIMM | 481 | CTTCGCGAATCCGAGGAGCGCGCTGCGGAGCTGGCGAGCCAGCTGGAGTCCACTACTGCT | 540 |
| KEIMM | 244 | CTTCGCGAATCCGAGGAGCGCGCTGCGGAGCTGGCGAGCCAGCTGGAGGCCACTGCTGCT | 303 |
| DDIMM | 340 | CTCCGCGAATCCGAGGCGCGCGCTGCGGAGCTGGCTGCGCAGCTGGAAGCCGCTGCTGCG | 399 |
| LCIMM | 541 | GCGAAGATGTCAGCGGAGCAGGACCGCGAGAGCACGAGGGCCACGCTAGAGCAGCAGCTT | 600 |
| KEIMM | 304 | GCGAAGTCGTCCGCGGAGCAGGACCGCGAGAACACGAGGGCCACGCTAGAGCAGCAGCTT | 363 |
| DDIMM | 400 | GCGAAGACGTCTGCTGGAGCAGGAGCGTGAGAAACACGAGGGCCACCTTGGAGGAGCGGTTG | 459 |
| LCIMM | 601 | CGTGACTCCGAGGAGCGCGCTGCGGAGCTGGCGAGCCAGCTGGAGGCCACTGCTGCTGCG | 660 |
| KEIMM | 364 | CGCGAATCCGAGGCGCGCGCTGCGGAGCTGGCGAGTCAGCTGGAGTCCACTGCTGCTGCG | 423 |
| DDIMM | 460 | CGGCTCGCTGAGGTCGCGCTGCGGAGCTGGCAGCGCGGCTAAAGAGCACTGCTGCTGTT | 519 |
| LCIMM | 661 | AAGTCGTCCGCGGAGCAGGACCGCGAGAACACGAGGGCCCGGTTGGAGCAGCAGCTTCGT | 720 |
| KEIMM | 424 | AAGTCGTCCGCGGAGCAGGACCGCGAGAACACGAGGGCCACG----- | 465 |
| DDIMM | 520 | AAGTCGCGATGGAGCAGGACCGCGAGAACACGAGGGCCACG----- | 561 |

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Figure 5

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LCIMM  1  LEQQLRESEERAAELASQLEATAAAKSSAEQDRENT RATLEQQLRESEERAAELASQLEA  60
KEIMM   1  -EQQLRDSEERAAELMRKLEATAAAKSSAEQDRENT RATLEQQLRESEEHAAELKAQLES  59
DDIMM   1  -EQQLRESEERAAELKAELEATAAAKTSVEQERKTRTALEG-----RAAELARKLEA  52

LCIMM  61  TAAAKMSAEQDRENT RATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQ  120
KEIMM  60  TAAAKTSAEQDRENT RAALQRLRESEERAAELASQLEATAAAKSSAEQDRENT RATLEQ  119
DDIMM  53  TASAKNLVEQDRERTRATLEERLRLAEVRAAELAGVLEATAAAKTAVEQERERTRAALQ  112

LCIMM  121  QLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRESEERAAELASQLESTTA  180
KEIMM  120  QLRESEERAAELASQLESTTAAKSSAEQDRENT RAT-----  155
DDIMM  113  QLRESEERAAELAAQLEAAAAKTSVEQERENT RATLEERLRLAEVRAAELAAARKSTAA  172

LCIMM  181  AKMSAEQDRESTRATLEQQLRDSEERAAELASQLEATAAAKSSAEQDRENT RAALQQLR  240
KEIMM  155  -----  155
DDIMM  173  VKSAMEQDRENT RAT-----  187

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Figure 6

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LCIMM  1  LEQQLRESEERAAELASQLEATAAAKSSAEQDRENT RATLEQQLRESEERAAELASQLEA  60
DDIMM   1  -----EQQLRESEERAAELKAELEA  20

LCIMM  61  TAAAKMSAEQDRENT RATLEQQLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQ  120
DDIMM  21  TAAAKTSVEQERKTRTALEG-----RAAELARKLEATASAKNLVEQDRERTRATLEE  73

LCIMM  121  QLRDSEERAAELASQLESTTAAKMSAEQDRESTRATLEQQLRESEERAAELASQLESTTA  180
DDIMM  74  RLRLAEVRAAELAGVLEATAAAKTAVEQERERTRAALQQLRESEERAAELAAQLEAAAA  133

LCIMM  181  AKMSAEQDRESTRATLEQQLRDSEERAAELASQLEATAAAKSSAEQDRENT RAALQQLR  240
DDIMM  134  AKTSVEQERENT RATLEERLRLAEVRAAELAAARKSTAAVKSAMEQDRENT RAT-----  187

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Figure 7

KEIMM 1 EQQLRDSEERAAELMRKLEATAAAKSSAEQ----- 30
DDIMM 1 EQQLRESEARAAELKAELEATAAAKTSVEQEREKTRTALEGRAAELARKLEATASAKNLV 60

KEIMM 30 --DRENT RATLEEQOLRESEEHAAELKAQLESTAAAKTSAEQDRENT RAAL EORLRESEER 88
DDIMM 61 EQDRERTRATLEERLRIAEVRAAELAGVLEATAAAKTAVEQERERTRAAL EQLRESEAR 120

KEIMM 89 AAELASQLEATAAAKSSAEQDRENT RATLEEQOLRESEARAAELASQLESTAAAKSSAEQD 148
DDIMM 121 AAELAAQLEAAAAAKTSVEQERENT RATLEERLRILA EVRAAELAA RLKSTAAVKSA MEQD 180

KEIMM 149 RENT RAT 155
DDIMM 181 RENT RAT 187

Figure 8

1 10 20 30 39

KEQQLRDSEETRAAELKAELEATAAAKTSVEQEREKTRTAL
LGRAAELARKLEATASAKNLVEQDRERTRATLERLRIS
AVGVKSAVTSME N AQQE
SA AQ S L

Figure 9

1 10 20 30 39

LEQQLRDSEERAAELMRKLEATAAAKSSAEQDRENT RAT
R E AH KAQS T A
AS

Figure 10

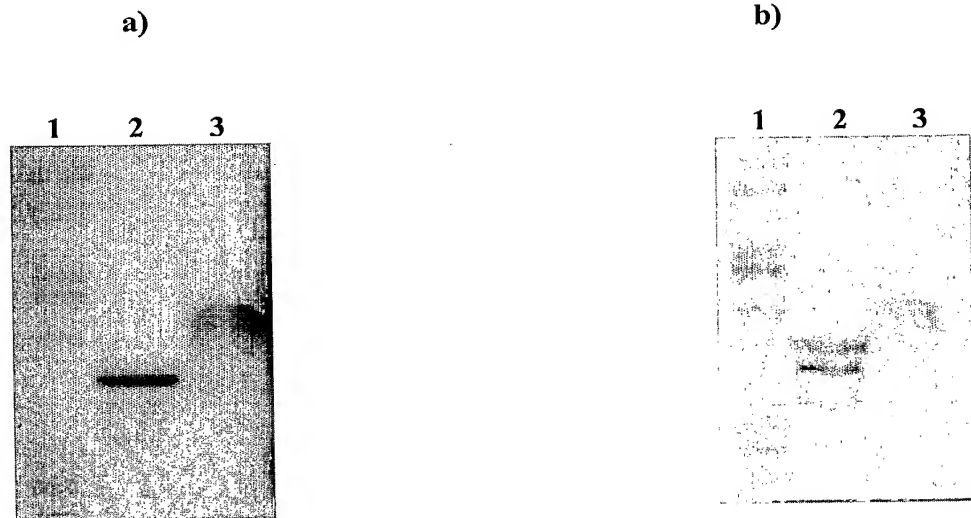
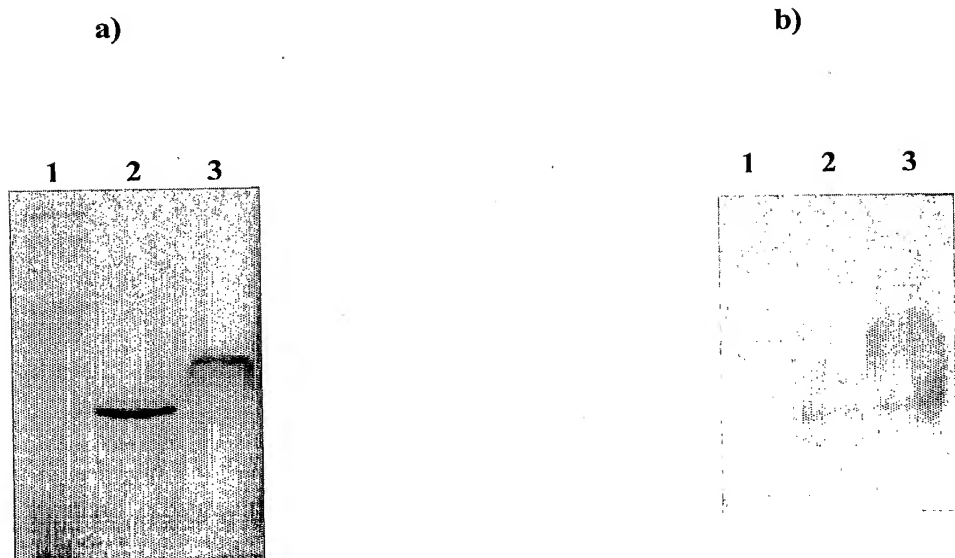


Figure 11



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Figure 12

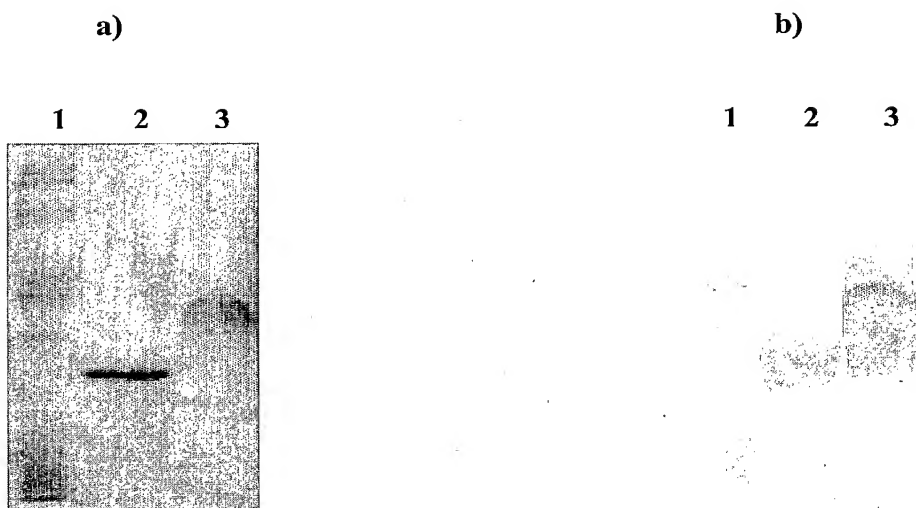
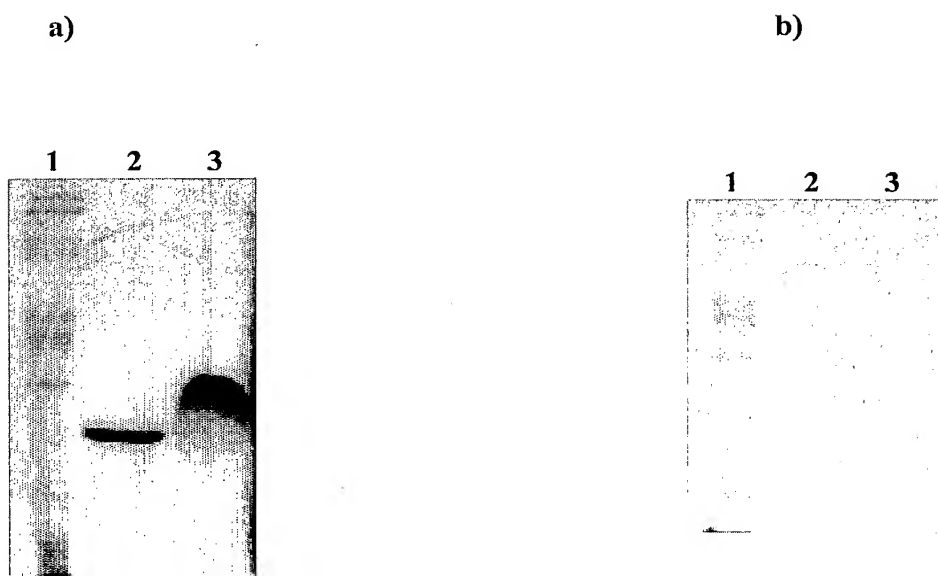


Figure 13



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Figure 14

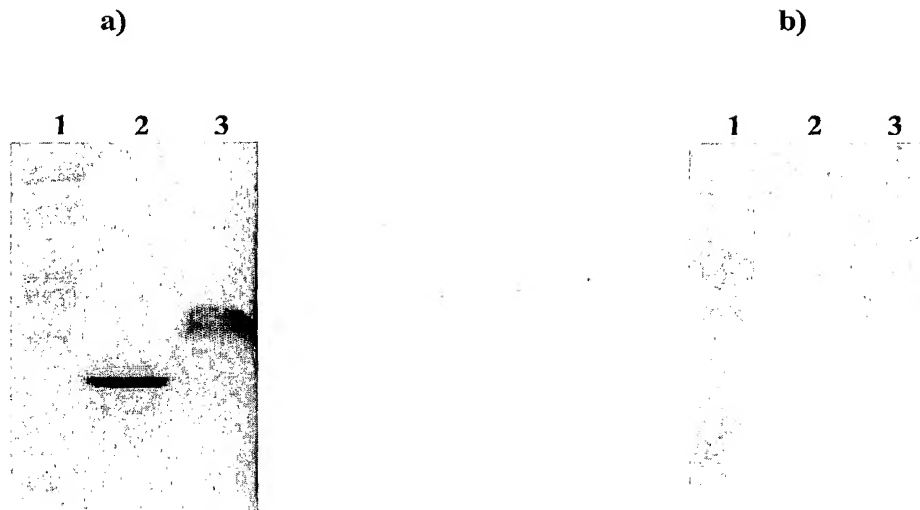
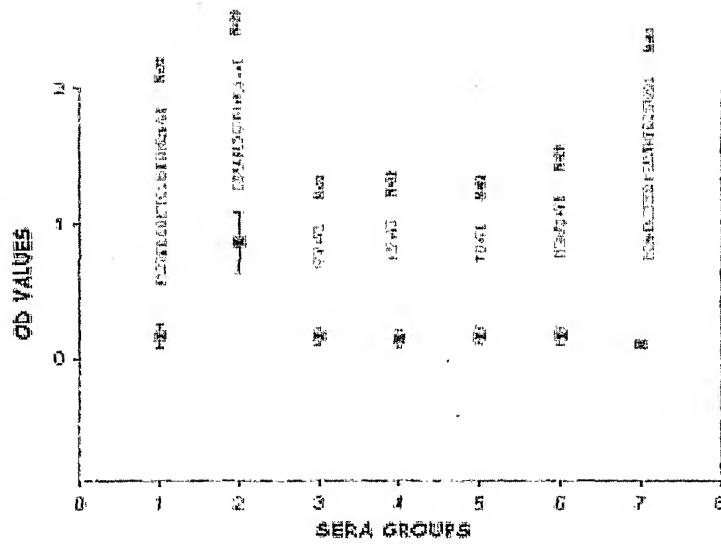


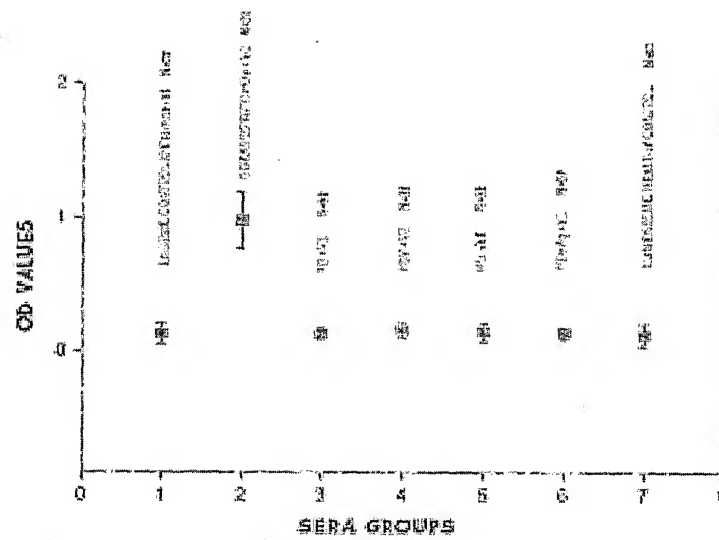
Figure 15



| | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 0.1670 | 0.8665 | 0.1634 | 0.1396 | 0.1663 | 0.1636 | 0.1080 |
| Std.Dev | 0.0882 | 0.2182 | 0.0598 | 0.0584 | 0.0534 | 0.0615 | 0.0295 |

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Figure 16



| | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 0.1290 | 0.9730 | 0.1300 | 0.1545 | 0.1456 | 0.1363 | 0.1219 |
| Std.Dev | 0.0716 | 0.2096 | 0.0419 | 0.0548 | 0.0705 | 0.0456 | 0.0796 |